patient could rest during her vacation, but they soon reappeared more severe than ever. The painful area became larger and a burning sensation was added. The duration of an attack was from ten to fifteen minutes. Walking was impossible. In the absence of the paroxysms, the skin in the trochanteric region felt dead and cold. This condition resisted the usual therapeutic measures; electricity, cautery, methyl chloride, salicylate of methyl, etc.

On examination an area of the size of the palm of the hand, anesthetic to all sensory impressions, was found anteriorly over the left trochanteric region. This area was bounded by a region of very well marked hyperesthesia, which extended anteriorly to the median line of the anterior surface of the thigh, posteriorly four fingers' breadth, from the fold of the buttock, in height to the iliac crest and depth to the middle of the thigh. On account of the severity of the pain, and its interference with an active life, an operation was decided upon. A resection of the nerve at the level and above the crural arch was done; about three to four cm. were resected. After the operation, there was a total disappearance of the pain, but the area supplied by the nerve remained anesthetic. General improvement of the patient was noted. A sufficient time has not elapsed to observe the permanent value of the operation.

The pathology of this case is probably a compression of the femoro-cutaneous nerve, sometimes at the crural arch, sometimes at the level of the canal of the fascia lata. The author believes that in cases of meralgia paresthetica of traumatic origin, with symptoms as severe as in this case, an operation is justified. SCHWAB.

ANATOMY AND PHYSIOLOGY.

8. UEBER DIE MOTORISCHEN LEITUNGSBAHNEN UND DIE ENTSTEHUNGSWEISE EPILEPTISCHER ANFÄLLE (Concerning the Motor Tracts and the Origin of Epileptic Attacks). Ernst Bischoff (Wiener klin. Wochenschrift, No. 39, Sept. 28, 1899, p. 961).

The experiments conducted by Bischoff are important, as they throw some light upon the causation of epileptic convulsions. He believes that the cerebellum probably has no part in the transmission of cortical impulses to the peripheral motor nerves, as, after extensive lesions of the cerebellum, even after extirpation, cortical irritation caused movements. A weak faradic current, which caused no contractions when applied to the cortex, produced strong tonic contractions of the opposite extremities when applied over an anterior pyramid. If the pyramid were cut below the point of irritation the contractions ceased, but were renewed with increased force when the current was applied to the pyramid below the point of division. This proves that in the dog the pyramidal tract certainly has motor functions, but irritation of the tract causes only tonic contractions of the muscles of the opposite extremities. Irritation of the pyramids does not produce clonic contractions; the tonic contractions do not persist after the irritation ceases, and muscles other than those first affected do not become involved, even though the irritation is prolonged. Irritation of the tegmentum at the level of the lower olives produces somewhat different results; only tonic contractions of the opposite limbs are caused by such irritation, but the increased tonicity persists a little time after the irritation has ceased, and the extremities of the side to which the irritation is applied are involved if the irritation is prolonged. This would seem to show that motor tracts are in the tegmentum. The contractions from cortical irritation are the same after the pyramids are cut as when they are intact. When one pyramid was cut the irritation of the cortex on the same side as the lesion had to be greater, in order to produce contractions in the contralateral side of the body, than was necessary for the production of contractions from the opposite hemisphere through the sound pyramid. When both tegmentum and pyramid on one side were cut, irritation of the cortex on the same side did not cause epileptic convulsions.

Bischoff's statements are:

1. An interruption of the pyramidal tract in the dog causes difficulty in the production of contractions in the muscles of the contralateral limbs from faradic irritation applied to the motor cortex corresponding to the tract.
2. Irritation of the cortical centers, however, causes isolated contractions in the contralateral extremities.
3. In spite of division of one or both pyramids, prolonged irritation of the motor cortex causes true epileptic convulsions.
4. It is uncertain whether the pyramidal tract in the dog and cat conducts the impulses necessary for epileptic convulsions. It seems improbable that it does, because after unilateral lesion of the tegmentum epileptic convulsions could not be produced in the contralateral extremities, and could not be produced when the lesion of the tegmentum was bilateral, notwithstanding that the pyramids were intact (in one case).
5. The pyramidal tract in the dog certainly has motor functions, because faradic irritation of the tract causes tonic contractions of the muscles of the contralateral extremities. A connection of the pyramid with the muscles of the homolateral extremities in the dog could not be demonstrated by direct faradic irritation.
6. Isolated lesion of the tegmentum seems to have no effect on the production of single contractions in the extremities of the side opposite to the irritated cortex. After extensive bilateral lesion of the tegmentum, when the pyramids were intact, single contractions were produced by a feeble current.
7. If the tegmentum and pyramid on one side are injured, irritation of the homolateral hemisphere causes more feeble contractions in the contralateral extremities than are seen in the homolateral extremities from irritation of the contralateral hemisphere.
8. After the thalamus, the subthalamic region and the pyramidal tract of one side have been destroyed, faradic irritation of the motor cerebral cortex on the same side produces no results. Such a lesion seems to destroy the connection between the hemisphere and the contralateral extremities.
9. Extensive bilateral lesion of the tegmentum and pyramid at the level of the pons seems to destroy completely the motor conduction, so that cortical irritation of either side is without any effect. Animals with such a lesion have persistent paralysis.
10. Contractions in the homolateral extremities from cortical irritation were seldom seen.
11. Division of one side of the tegmentum with partial or complete lesion of the homolateral or both pyramids at any part between the thalamus and the proximal end of the vagus nucleus prevents the production of epileptic convulsions in the contralateral extremities from faradic irritation of the cerebral cortex of the operated side.
12. Continued irritation of the cerebral motor cortex of the operated side caused an epileptic attack in the homolateral extremities following tonic contractions of the contralateral extremities.
13. The cerebral cortex may be intact, and may have a partial connection with the spinal cord, but epileptic contractions do not occur in the limbs contralateral to the injured pyramid. This seems to show that in the tegmentum some change occurs in the impulse necessary for the epileptic convulsions. SPILLER.